

# Plug-In High Pass Filter

## PHP-300+

50Ω 290 to 1200 MHz

### Maximum Ratings

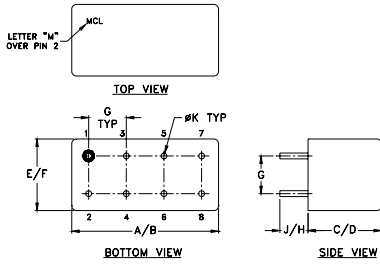
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

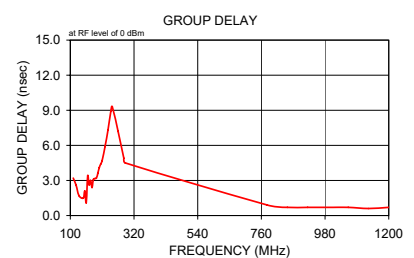
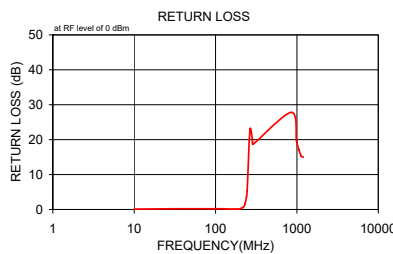
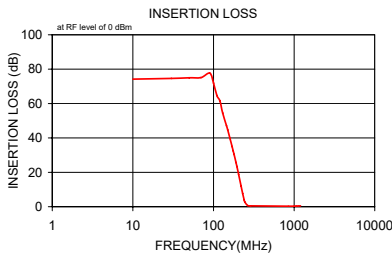
INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7
CASE GROUND	2,3,4,5,6,7

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

### Features

- rugged shielded case, hermetically sealed
- other standard and custom PHP models available with wide selection of fco

### Applications

- lab use
- transmitters/receivers
- military/hi-rel application



Generic photo used for illustration purposes only

CASE STYLE: A01

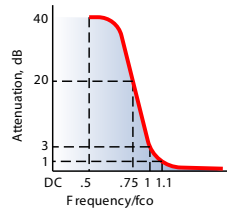
**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

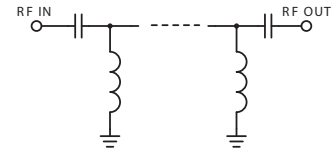
### High Pass Filter Electrical Specifications

STOPBAND (MHz)	fco (MHz) Nom.	PASSBAND (MHz)	VSWR (:1)
(loss > 40 dB)	(loss > 20 dB)	(loss < 1.5 dB)	Stopband Typ. Passband Typ.
DC-145	145-190	290-1200	17 1.7

### typical frequency response



### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$		
10.0	74.21	2.4	110.0	3.17
30.0	74.57	4.0	120.0	2.56
50.0	75.03	6.1	130.0	1.73
70.0	75.11	1.9	145.0	1.50
90.0	77.67	5.6	150.0	2.07
100.0	71.90	4.0	155.0	1.11
110.0	64.71	1.1	160.0	3.42
120.0	61.50	1.0	165.0	2.57
130.0	54.50	0.9	170.0	2.97
145.0	47.14	0.4	175.0	2.43
150.0	44.66	0.4	180.0	3.14
160.0	39.74	0.4	190.0	3.21
170.0	34.99	0.4	195.0	3.62
175.0	32.61	0.4	200.0	4.11
180.0	30.36	0.4	205.0	4.38
190.0	25.67	0.4	210.0	4.71
195.0	23.38	0.4	220.0	5.85
205.0	18.79	0.4	230.0	7.34
220.0	11.96	0.4	240.0	8.94
230.0	7.65	0.3	245.0	9.28
240.0	4.02	0.3	265.0	7.19
245.0	2.69	0.2	285.0	4.93
265.0	0.66	0.1	290.0	4.53
285.0	0.52	0.1	780.0	0.87
290.0	0.52	0.1	850.0	0.75
850.0	0.28	0.1	920.0	0.72
990.0	0.33	0.1	990.0	0.72
1060.0	0.38	0.1	1060.0	0.75
1130.0	0.42	0.1	1130.0	0.56
1200.0	0.47	0.1	1200.0	0.68